

Amendments to Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of modifying an activity of at least one ~~alternative splicing regulatory hnRNP A~~ protein within at least one cell, which comprises the steps of:

introducing into the cell a plurality of polynucleotide sequences ~~directed to the alternative splicing regulatory~~ capable of binding to the hnRNP A protein; and

interacting the polynucleotide sequences to with the ~~alternative splicing regulatory hnRNP A~~ protein within the cell, wherein the polynucleotide sequences compete in trans with at least one endogenous RNA sequence for interacting with the ~~alternative splicing regulatory hnRNP A~~ protein.

2. (previously presented) The method of Claim 1, wherein the polynucleotide sequences are introduced into the cell by electroporation.

3. (previously presented) The method of Claim 1, wherein the polynucleotide sequences are introduced into the cell by applying the polynucleotide sequences to a surface of the cell.

4. (previously presented) The method of Claim 3, wherein the polynucleotide sequences are packaged in at least one liposome.

5. (previously presented) The method of Claim 3, wherein the polynucleotide sequences are applied to a surface of the cell along with a detergent.

6. (previously presented) The method of Claim 1, wherein the cell is at least one tissue culture cell.

7. (previously presented) The method of Claim 1, wherein the cell is at least one non-human cell.

8. (previously presented) The method of Claim 1, wherein the cell is at least one non-human mammalian cell.

9. (previously presented) The method of Claim 1, wherein the cell is at least one avian cell.

10. (previously presented) The method of Claim 1, wherein the cell is at least one non-human tissue culture cell.

11. (previously presented) The method of Claim 1, wherein the polynucleotide sequences further comprise at least one isolated and purified RNA molecule.

12. (previously presented) The method of Claim 1, wherein the polynucleotide sequences further comprise at least one synthetic RNA molecule.

13. (previously presented) The method of Claim 1, wherein the polynucleotide sequences further comprise at least one synthetic RNA analog.

14. (previously presented) The method of Claim 1, wherein the polynucleotide sequences are single-stranded.

15. (currently amended) The method of Claim 1, wherein the step of interacting the polynucleotide sequences to the ~~alternative splicing regulatory~~ hnRNP A protein further comprises regulating the activity of the ~~alternative splicing regulatory~~ hnRNP A protein.

Claims 16-20 (canceled)

21. (previously presented) The method of Claim 1, further comprising the step of determining an effect on RNA processing by at least one resulting phenotypic characteristic of the cell.

Claims 22-28 (canceled)

29. (currently amended) A method of modifying an activity of at least one hnRNP A1 protein within at least one cell comprising the steps of:

introducing into the cell a plurality of polynucleotide sequences capable of binding to the hnRNP A1 protein; and

interacting the polynucleotide sequences to with the hnRNP A1 protein within the cell, wherein the polynucleotide sequences compete in trans with at least one endogenous RNA sequence for interacting with the hnRNP A1 protein.

30. (previously presented) The method of Claim 29, further comprising the step of determining an effect on RNA processing by at least one resulting phenotypic characteristic of the cell.

Claims 31-36 (canceled)

Claims 37-42 (canceled)

Claims 43-54 (canceled)

55. (previously presented) The method of Claim 1, wherein the polynucleotide sequences comprise a plurality of sequences from an mRNA wherein the sequences from the mRNA are intronic splicing silencers, intronic splicing enhancers, exonic splicing silencers or exonic splicing enhancers.

56. (currently amended) The method of Claim 1, wherein the ~~alternative-splicing regulatory hnRNP A~~ protein is selected from the group consisting of hnRNP A/B A1 protein, hnRNP A₁^B protein, and hnRNP B A2 protein, ~~and hnRNP A1 protein.~~

57. (currently amended) A method of modifying an activity of at least one ~~alternative-splicing regulatory hnRNP A~~ protein within at least one cell, which comprises the steps of:

introducing into the cell a plurality of polynucleotide sequences comprising at least one intronic splicing silencer; and

interacting the polynucleotide sequences ~~to~~ with the ~~alternative-splicing regulatory hnRNP A~~ protein within the cell, wherein the polynucleotide sequences compete in trans with at least one endogenous RNA sequence for interacting with the ~~alternative-splicing regulatory hnRNP A~~ protein.

58. (currently amended) The method of Claim 57, wherein the ~~alternative-splicing regulatory hnRNP A~~ protein is selected from the group consisting of hnRNP A/B A1 protein, hnRNP A₁^B protein, and hnRNP B A2 protein, ~~and hnRNP A1 protein.~~

59. (currently amended) A method of modifying an activity of at least one ~~alternative-splicing regulatory hnRNP A~~ protein within at least one cell, which comprises comprising the steps of:

introducing into the cell a plurality of polynucleotide sequences comprising at least one intronic splicing enhancer; and

interacting the polynucleotide sequences to with the alternative splicing regulatory hnRNP A protein within the cell, wherein the polynucleotide sequences compete in trans with at least one endogenous RNA sequence for interacting with the alternative splicing regulatory hnRNP A protein.

60. (currently amended) The method of Claim 59, wherein the alternative splicing regulatory hnRNP A protein is selected from the group consisting of hnRNP A/B A1 protein, hnRNP A1^B protein, and hnRNP B A2 protein, and hnRNP A1 protein.

61. (currently amended) A method of modifying an activity of at least one alternative splicing regulatory hnRNP A protein within at least one cell, which comprises the steps of:

introducing into the cell a plurality of polynucleotide sequences comprising at least one exonic splicing silencer; and

interacting the polynucleotide sequences to with the alternative splicing regulatory hnRNP A protein within the cell, wherein the polynucleotide sequences compete in trans with at least one endogenous RNA sequence for interacting with the alternative splicing regulatory hnRNP A protein.

62. (currently amended) The method of Claim 61, wherein the alternative splicing regulatory hnRNP A protein is selected from the group consisting of hnRNP A/B A1 protein, hnRNP A1^B protein, and hnRNP B A2 protein, and hnRNP A1 protein.

63. (currently amended) A method of modifying an activity of at least one ~~alternative splicing regulatory hnRNP A~~ protein within at least one cell, which comprises the steps of:

introducing into the cell a plurality of polynucleotide sequences comprising at least one exonic splicing enhancer; and

interacting the polynucleotide sequences to with the ~~alternative splicing regulatory hnRNP A~~ protein within the cell, wherein the polynucleotide sequences compete in trans with at least one endogenous RNA sequence for interacting with the ~~alternative splicing regulatory hnRNP A~~ protein.

64. (previously presented) The method of Claim 63, wherein the ~~alternative splicing regulatory hnRNP A~~ protein is selected from the group consisting of hnRNP A_B A₁ protein, hnRNP A₁^B protein, and hnRNP B A₂ protein, and hnRNP A₁ protein.